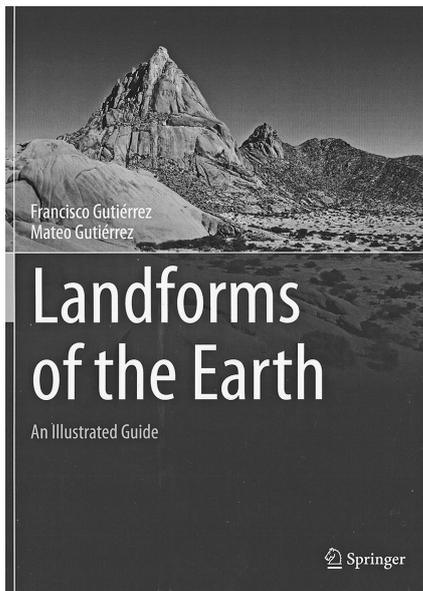


Book reviews

Landforms of the Earth. An Illustrated Guide, by F. Gutiérrez and M. Gutiérrez, 2016. Springer International Publishing, Switzerland. 270 pages. Hardback: price USD 129.00, ISBN 978-3-319-26945-0.



Geomorphology has once been named ‘the science of the scenery’. To explain the origin of natural scenery and to predict future changes is the goal of this discipline. Over the years an ever more complex and sophisticated toolbox has become available to geomorphologists to assist in their research endeavours and, concomitantly, the quality of data that reveal the spatial configuration of landforms has increased exponentially. Analyses of high-resolution DEMs, aerial photographs and satellite images have become almost routine, but – as the authors of the present book note, “We only see what we know”. The questions are therefore, “Do we know landforms?” and “Are we able to recognise them? The present book, written by two eminent Spanish geomorphologists and experienced academic teachers, is intended to help precisely with that – identification of landforms. As such, the main strength and individuality of the book lies not in the text, but in the multitude of high-quality illustrations which show what different landforms, both major and minor, look like.

Altogether, the book contains more than 360 images, mostly ground-level photographs taken by the senior author himself, but there also many superb aerial photographs taken from low height, as well as 35 satellite images to show landforms and patterns that are too large to be captured by conventional photography. Examples are literally from every continent and include both famous, well-known localities as well as less familiar, albeit equally impressive, ones. Among the latter are many from the authors’ home country of Spain and they make a very good excuse to undertake a geomorphological trip to northern Spain, to see these wonders of geomorphology, especially in the Pyrenees and in the semi-arid Ebro Basin. A number of images illustrate localities which feature in the UNESCO List of World Heritage properties, many exactly because of their outstanding geomorphological values. Among those featuring in this book are Uluru and Kata Tjuta in Australia, the Namib Sand Sea, Yellowstone Park, the South China Karst and Yosemite Park. Photographs accompany rather short texts in which key data on particular landforms or processes are provided. Thus, the present tome is not yet another textbook of geomorphology but should be used as an additional source that speaks mainly through images.

The structure adopted for the book follows the classic subdivision of geomorphology into endogenic/structural landforms, azonal surface processes and specific morphoclimatic zones of the globe. Part I has chapters that focus on structural landforms that are understood as those adjusted to geological structure, especially to the dip and strike of strata in sedimentary rocks, tectonic landforms, volcanic landforms, karst landforms and granite landforms, the last-named as a distinct suite of relief forms developed on particularly massive rocks. In part II the reader is given examples of various weathering products, different types of mass movements, fluvial landforms, including those produced by surface runoff on slopes, plus coastal landforms. The focus

in part III is on glacial landforms, followed by periglacial and finally, desert and aeolian landforms. Although the structure is clear, overlaps are inevitable, e.g., some examples of weathering features are those from limestone or granite bedrock, whilst frost shattering is presented in the chapter on weathering, and not in that on periglacial landforms. However, an extensive index helps to locate examples of landforms of interest. Leaving man-made landforms aside, there is one theme missing from this book – biogeomorphology and biogenic landforms, a bit at odds with the currently increased awareness of the importance of biogenic processes and agents, from large-scale examples of coral reefs (although these are actually included into coastal landforms here) through ephemeral structures such as termite mounds to the role of tree uprooting to shape morphology of forested slopes. One may also note that certain themes are represented more strongly than others. This is the case for karst, illustrated by as many as 29 different types of landforms, and aeolian landforms (19 types), whereas glacial landforms include only eight and granite landforms (the favourite subject for the reviewer!) by a mere four. However, I do not think that an ideal set of landform examples exists and this partial imbalance should not be seen as major criticism.

In fact, this is a book both to be used as a prime source for studying geomorphology and to be enjoyed while relaxing. Indeed, “Landforms of the Earth” can serve many purposes. It will help students recognise different types of landforms and interpret the physical landscape. It will provide teachers with perfect examples to illustrate the subject they teach and will illustrate the beauty of the scenery to those interested in landscape aesthetics. It contains suggestions for travellers where to go to see particular types of scenery. A minor suggestion for a possible second edition is to annotate some photographs and name specific geomorphic features they show. Their presence may be obvious to experienced geomorphologists but not necessarily to those who start learning about landforms.

To conclude, this is a nicely produced, informative and attractive approach to geomorphology through pictures. Not too many of this kind have ever been published and at the moment there is no direct competitor on the market. It is good to have it within reach.

Piotr Migoń
University of Wrocław, Wrocław, Poland
piotr.migon@uwr.edu.pl